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India

Grain and Feed

Shopping for Pulses

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Approved by:

Weyland Beeghly

U.S. Embassy, New Delhi

Prepared by:

A. Govindan

Report Highlights:

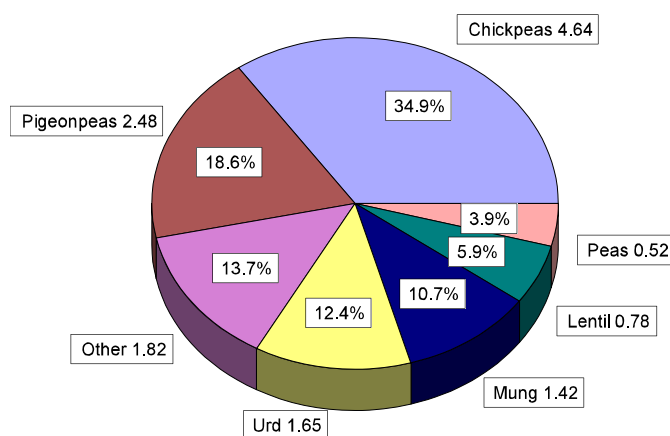
India, the world's largest importer and consumer of pulses, offers attractive marketing opportunities for medium-quality, economically-priced peas, beans and lentils.

Includes PSD changes: No
Includes Trade Matrix: No
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New Delhi [IN1], IN

India: A Wide Array of Pulses....

Probably no other country produces and consumes as varied an array of pulses as India: *desi* chickpeas (*gram*, *bengal gram* or *chana*), garbanzos (*kabuli gram*), pigeonpeas (*tur* or *arhar*), lentils (*masur*), mung beans (*green gram*), black matpe (*urd*, *black gram*), horse gram (*kulthi*), moth beans, yellow peas, black eye beans (*lobia*), kidney beans (*rajma*), chickling veltch (*khesri*) and several minor pulses. *Desi* chickpeas constitute the biggest share of India's pulse production (Figure 1). Pulses are an integral part of Indian agriculture -- an important source of protein for its people and a significant source of nitrogen for the soil. Yet, pulse production has stagnated over the past 50 years (see Annex 1).

Figure 1. Pulse Production by Type (million metric tons)



....but Stagnant Production

Pulse production has exhibited only a marginal upward trend (103,000 tons/year) since 1970/71, but with wide year-to-year fluctuations (Figure 2). Most of the growth is attributable to lentils, *mung* beans, *urd*, and *tur*. However, minimal changes in chickpea and other pulse production have led to an insignificant overall growth in pulse output. Following the introduction of high yielding wheat varieties in the mid-1960s, there was some shift in planted area from chickpeas to wheat, particularly in irrigated areas (Figure 2A). This substitution was largely offset by increased plantings of pigeonpeas, lentils, *mung*, and *urd*. While the per hectare yield of pulses has remained static, the development of several short season varieties of lentils, *urd*, and *mung* have led to yield improvements for those pulses.

Figure 2. India: Pulse Production Trend

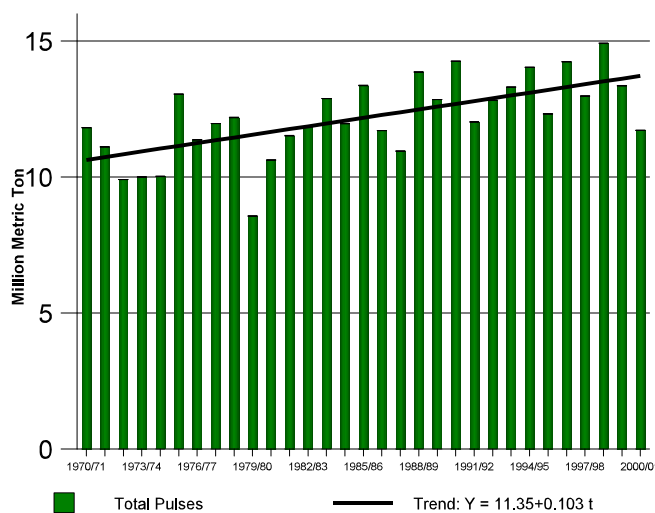
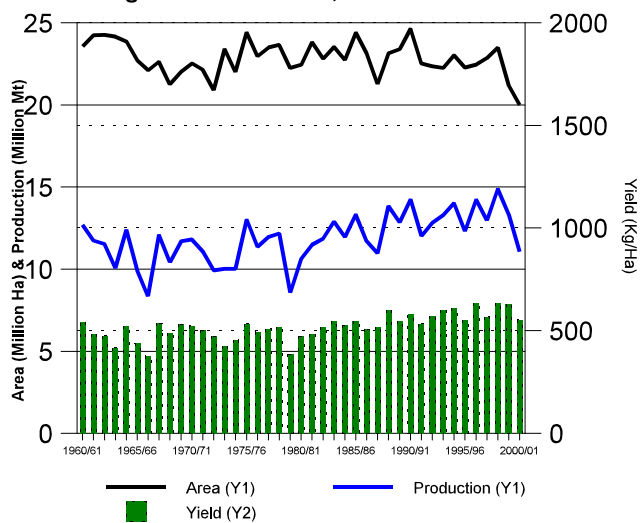


Figure 2A. Pulse Area, Production and Yield



India's central state of Madhya Pradesh is the largest producer of pulses, accounting for around 28 percent of total production. Other states with significant pulse production include Uttar Pradesh (20%), Maharashtra (16%), Rajasthan (7%), Karnataka (6%), Andhra Pradesh (6%), and Bihar (5%). Chickpeas, peas, and lentils are mostly grown in temperate region, whereas most other pulses are grown in tropical region. For the geographical location of these states, see the map below. Annex 2 shows the varieties grown by the top four producers.



Per Capita Consumption Declining

As a result of the surging population and stagnating pulse production, per capita pulse consumption has steadily declined from around 70 grams/day in the early 1960s to around 31 grams in 2000. Production must grow by about 500,000 metric tons per year to keep up with the growth in population. Despite an open trade regime and increasing domestic prices for pulses, imports were inadequate to fill the supply demand gap. Relative prices of pulses vis a vis cereals have been rising and reducing quantity demanded (see Figure 3A).

Figure 3. Per Capita Pulse Consumption

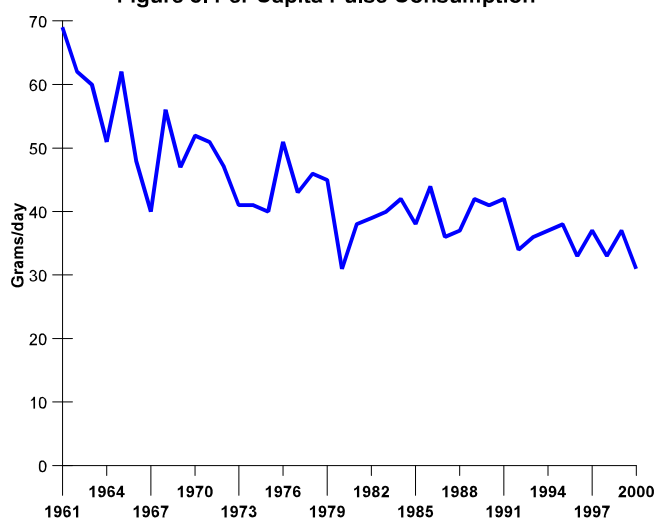
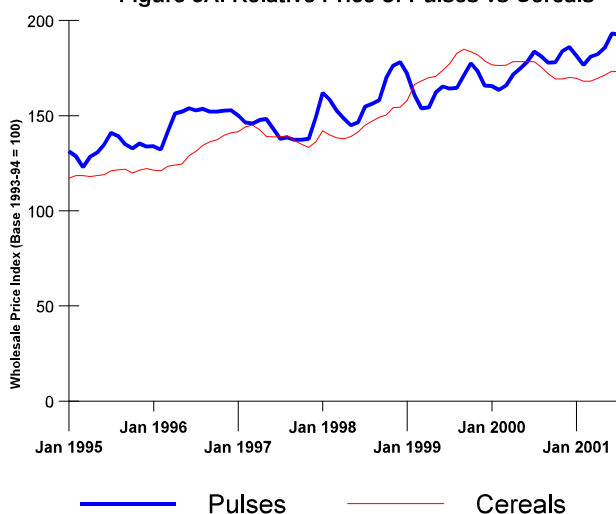


Figure 3A. Relative Price of Pulses vs Cereals



Distinct Regional Preferences....

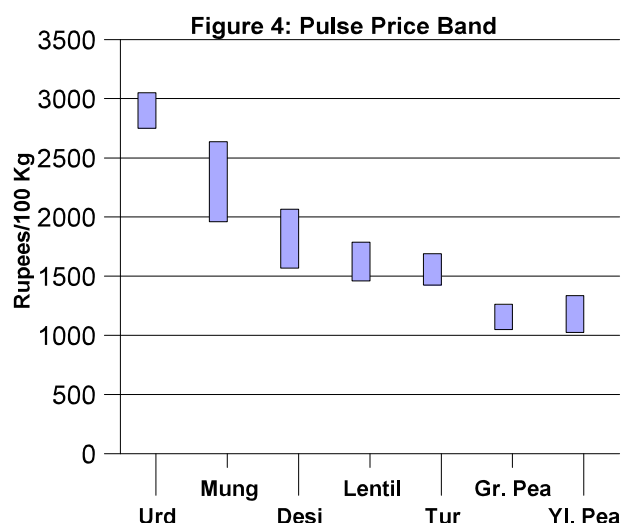
There are distinct regional preferences for pulses. Moreover, the organization and strategies of the pulse industry have been tailored to these distinct preferences. For example, while *desi* chickpeas have universal appeal, *kabuli* chickpeas are a niche item consumed mostly in north India but its popularity is increasing in other parts of the country. Pigeonpeas are mostly preferred in southern and western states. Lentils are popular in the north and east and least preferred in the south. *Urd* is predominantly consumed in southern states, where it is a major ingredient in snack foods such as *idli*, *dosa*, and *vada*. *Urd* and *mung* are also well-liked in east India and in the state of Maharashtra. Green and yellow (white) peas are consumed in most parts of the country, but the use of high quality (and costlier) US green peas is mainly confined to major cities such as Mumbai, Chennai, Calcutta, and Delhi. They also are used by some snack manufacturers, and restaurants substitute them for fresh peas during the off season. Imported yellow peas from Canada are relatively inexpensive and are now becoming a major substitute for higher priced local (*desi*) chickpeas and pigeonpeas. Split yellow peas are also being blended with split chickpeas and pigeon peas. Yellow pea flour, because of its lower price, is used as an adulterant in chickpea flour (*basan*). Consumption of kidney beans is mostly confined to north India, whereas black eye beans are used in most parts of the country (although consumption is small). Moth beans are mainly used in Rajasthani snack foods. *Horsegram* and *khesari* are mostly consumed by low income consumers in rural areas and in the tribal belts of Madhya Pradesh, Orissa, Rajasthan, and Bihar.

....and Varied Uses

Almost 80 percent of Indian pulses are consumed either in split form or as flour. Some exceptions to this rule include green peas and *kabuli* chickpeas. Split and whole pulses are generally cooked and served as *dhal* along with rice or *roti* (traditional Indian unleavened flat bread). *Dhal fry* (cooked pulses with fried onions and spices) is an indispensable entree served in all types of establishments including roadside *dhabas* (eating places), restaurants, and luxury hotels, and. Chickpea flour (*basan*) is a major ingredient in several Indian snack foods. *Urd* and *mung* flour also go into making snack foods such as *pappad* (a kind of wafer). Peas are cooked, fried or roasted and eaten as a snack food. These can also be used as fillers in traditional snacks such as *samosa* or used in fried rice. India's snack food industry is growing at a very rapid pace, generating increased demand for pulses, particularly *desi* chickpeas, *urd*, *mung* and peas. Some multinational firms are now active in manufacturing and marketing Indian-type snacks.

Fluctuating Prices ...

Domestic pulse prices fluctuate widely depending upon supplies. Among imported pulses, *kabuli* chickpeas (9 mm and above in diameter) are the costliest; yellow peas, green peas, and dun peas are the cheapest. Other imported pulses such as *desi* chickpeas, *urd*, *mung*, black eye beans, kidney beans, and lentils fall in between. While dry green peas used to enjoy a premium over yellow peas, the substitution of yellow peas for *desi* chickpeas and *tur* has now made yellow peas more expensive. US dry green peas are priced significantly above Canadian green and



Note: 1US\$ = Rupees

48

yellow peas, thus confining demand to high income consumers in major cities. Among domestic pulses, *urd* and *mung* are typically the costliest, followed by lentils and *desi* chickpeas. Black eye beans, *tur*, and kidney beans fall in between. Domestic pulses typically fetch a premium, albeit small, over imported pulses of the same types because of their perceived taste and quality attributes. Pulse demand is price elastic among low-income consumers. They will tend to consume less pulses (and protein) and more grains or vegetables when pulse prices are relatively high. Many consumers substitute readily between different pulse varieties based on price. Figure 4 shows the price band for pulses between January and June 2001.

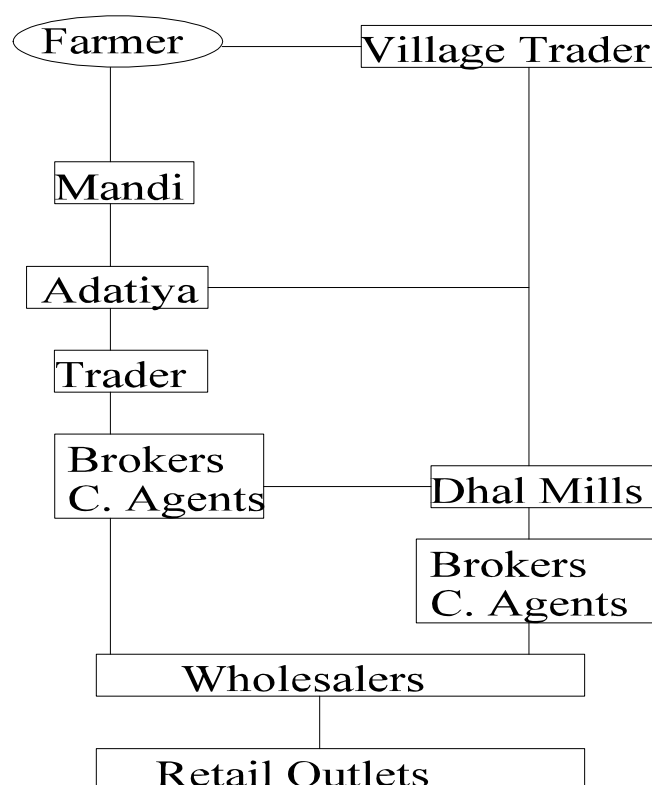
Marketing Involves Many Intermediaries

Of the roughly 13.5 million tons of pulses produced in India, about 85 percent are sold through the marketing channels shown in Figure 5. The balance is kept by farmers for seed and food use.

The several layers of intermediaries result in high margins between producers and consumers. The commission agents/brokers typically take 1 to 1.5 percent, and there are more than a few of them in the marketing chain. The retail markup is much higher (40 to 50% over wholesale prices), which must cover the costs of transportation from the wholesalers, storage at warehouses, cleaning, packaging, etc. There is a range of retail markups with the government stores having the lowest markup and some of the private supermarkets having the highest. However, the retail markup greatly exceeds the markup at the wholesale level.

Mandis are networks of delivery points located near production areas and are important market outlets for farmers. Relatively high volumes of pulses are traded in *mandis*, especially during

Figure 5. Marketing Channels for Pulses



harvest. Trading in *mandis* is mediated by the large number of commission agents (*adatiyas*) operating in the markets. There are two types of *adatiyas*: the *katcha adatiyas* and *pucca adatiyas*. The former is a pure commission agent, while the latter usually finances trades on behalf of distant buyers and may engage in business for himself. A farmer would bring his pulses to *mandis* in bullock carts, tractor trailers, etc. He engages an *adatiya* to sell his product. The *adatiya* displays his product in the market yard. Buyers (wholesalers, traders, millers or their agents) move from heap to heap, picking samples and making their assessment of price based on quality. There is no uniform objective grading, but only subjective grading by individual traders based on local practice. With no standard grading system, visual rating is the norm, with product being categorized as either Fair Average Quality (FAQ) or Special Quality (SQ). The products are then auctioned according to local practice (either open auction or written tenders). After a deal is made, pulses are bagged, weighed, and loaded onto the buyer's vehicle and transported to a mill or warehouse. Payment is made in cash for immediate delivery through the commission agent who retains the *mandi* fee (paid by the buyer) and other fees authorized by the market committee.

Pulses are distributed to consumers through private wholesale and retail networks. There are large

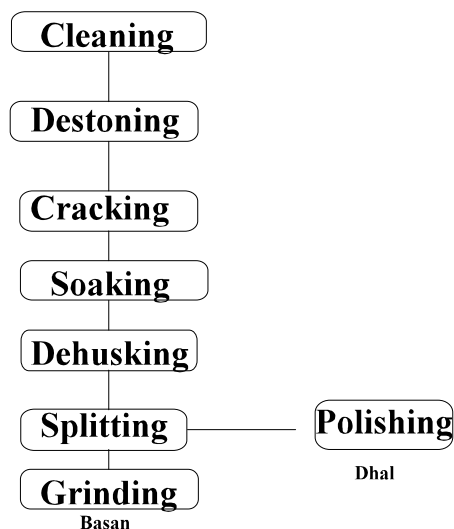
wholesale markets in or near all major cities (major ones include Vashi near Mumbai, Naya Bazar in Delhi, Postha in Calcutta, and Govindappa Naiken street in Chennai). A wholesale market will have 50 to 200 wholesale traders who deal with all types of domestic and imported pulses. Daily volume ranges from 10 to 20 tons per wholesaler. Wholesalers typically sell to retailers a minimum of one bag (50 kg or 100 kg). Retailers may add value by cleaning or sorting the product to remove foreign material (e.g. stones) and inferior quality pulses. Most pulses (split or whole) are sold loose to customers. Sales in consumer packs (mostly 0.5 and 1 kg. bags) are limited and confined mostly to cities. Some supermarket chains, particularly in south India, sell fast-moving pulses such as *urd dhal* and *tur dhal* in 2 and 5 kg. packs, with small discounts on larger sizes.

Branded pulses are a very small fraction of the pulses trade. Unlike vegetable oils or wheat flour, no large companies are involved in the marketing of pulses and no national level brands exist. Although national branding may be attractive to higher income consumers, low income consumers are not interested in branded pulses, unless it means lower prices. Large companies are not interested in setting up vertically-integrated pulse processing plants in India because of government regulations and localized and variable raw material supplies. Government regulations comprise the Essential Commodities Act (which sets stock limits on pulses), credit restrictions on pulse trade established by the Reserve Bank of India, and the small scale of pulse milling.

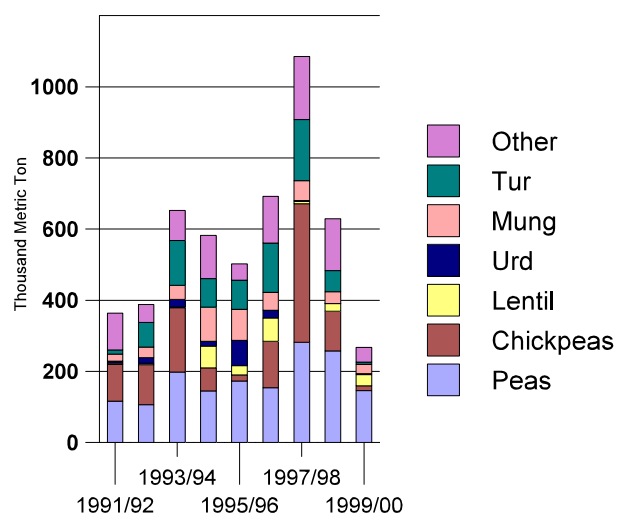
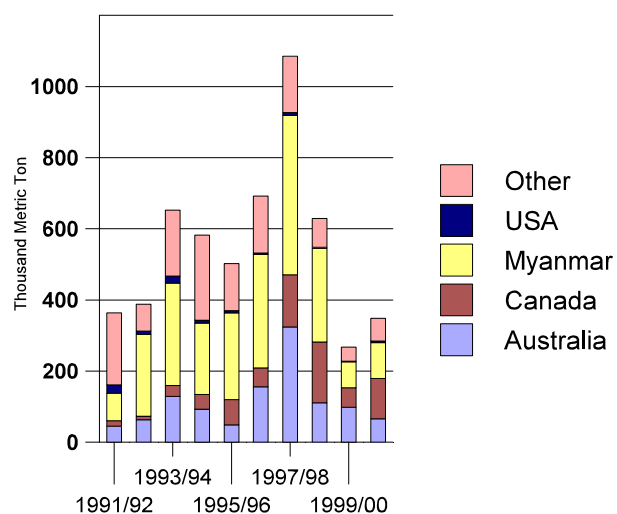
Antiquated Processing Technology ...

Pulse processing is a small scale industry comprised of thousands of *dhal* mills distributed throughout the country. Mills are most concentrated in producing areas such as Indore (Madhya Pradesh), Jalgaon and Akola (Maharashtra), and in or near major cities such as Calcutta, Mumbai, Chennai, Hyderabad, and Delhi. Most mills use locally developed, highly labor-intensive technology. However, there are a few mills with imported machinery; some even use Sortex machines to improve quality by removing off-color grains (mostly for exports). Despite their obsolete technology, Indian millers claim to produce world-class *dhal*, which enjoys great export demand. No importer wants to pay a foreign processor to do milling.

The Indian pulse milling process consists of several steps (see Figure 6). First, the pulses are cleaned and the stones and mud are removed. Then, the surfaces of the pulses are scratched so that when they are soaked in a mixture of water and vegetable oil, it is easier to remove the husks during the grinding process. Once the outer layer is removed, the pulses are split in half. To give a better finish, some processors polish the *dhal*. Some pulses (mostly chickpeas, *urd*, and *mung*) are milled to make flour (*basan*). A pulse miller doing custom milling near Mumbai charges 100 to 150 *rupees* per ton (depending on the type of pulse) as a milling charge (at an assured 85 percent recovery rate). The pulse husk and other byproducts are retained by the miller to be sold as cattle feed. As a rule of thumb, the trade uses 300 *rupees* per metric ton as the cost of splitting. There is very little canning or dehydration of pulses

Figure 6: Pulse Milling Process**A Consistent Importer....**

The Government of India began allowing imports of pulses under Open General License in 1979, which authorized shipments without licensing or quantitative restrictions. Import duties in most years were zero, but from time to time the government imposed duties of 5 - 35 percent. The current level of duty, in effect since April 1, 2001, is 5 percent. Import volume has ranged from 350,000 metric tons to 1 million tons depending on domestic production as well as international availability and prices (see Annex 3 and Figures 7 and 8). Due to a significant decline in the 2001 rabi (winter season) pulse crop, particularly for *desi* chickpeas, trade sources estimate that 2001/02 imports may reach a record 1.3 - 1.5 million tons. Historically, chickpeas and dun peas have been the largest pulse imports, but in recent years, peas (green and yellow) have become prominent because of their low price and increasing availability. Imports of high quality (9 mm and above) *kabuli* chickpeas have also shown a marked increase in recent years. Other imports include *mung*, *urd*, lentils, pigeonpeas, kidney beans, and black eye beans.

Figure 7. Pulse Imports by Type**Figure 8. Pulse Imports by Country**

Pulse Trade is Flexible ...

Since imported pulses are predominantly a food source for low- and low-middle income Indians, price is the key factor in determining which supplier makes the sale. India's pulse trade is flexible and open to exploring non-traditional pulses and suppliers if prices are attractive and the products fit into the Indian diet. The recent upsurge in yellow pea imports is a good example. Imports occurred mainly due to their lower price and their substitutability for higher-priced *desi* chickpeas and pigeonpeas. Trade sources believe that yellow pea imports are here to stay, and may displace green peas because of their adaptability to Indian cuisine.

Where Do Indian Importers Shop for Pulses?

As already mentioned, India is a very price conscious market as imported pulses are consumed mainly by low- and lower-middle income consumers. Therefore, Indian importers look mostly for medium-quality, lower priced products. Some importers are willing to pay small premiums for higher quality based on size, color, luster, uniformity, and origin.

Green/Yellow Peas: The most preferred variety is Canadian # 2 or better. Dun peas (farm dressed basis) from Australia are also imported. US Rumba and Clipper brands are popular but constrained by high prices. Some unscrupulous Indian traders are bagging and branding non-US products as Rumpa or Rambha (even copying the US Dry Pea Lentil Council's logo) and selling them on the local market at a premium. There are small imports of split yellow peas from Australia.

Desi chickpeas: Australian Tyson is considered superior (closer to the most preferred Indian varieties). Canada is also a supplier but their *desi* chickpeas are considered low quality due to their high moisture content. Importers of *desi* chickpeas prefer look mainly for color, they prefer yellow, and since most are used for *dhal* and *basan* milling, yield is also important.

Kabuli Chickpeas: There is a premium for large (9 to 13 mm) chick peas, with the largest sizes coming from Mexico. More than 80 percent of imports are 8 to 9 mm (mostly Canadian, Turkish, and US). There are also some imports of 7 to 8 mm (Iran) and 6 to 7 mm (Myanmar). *Kabulis* are speciality items used mostly during marriage parties. Hence price is not as important. *Kabulis* are not usually turned into flour except for smaller ones which have an advantage because they have no husk.

Lentils: These are mostly from Canada, Turkey, and Australia. Australian lentils are considered superior due to their high quality. Preference is for large red lentils for splitting. There is a market for small red lentils in Muslim areas. Yellow lentils are preferred in south India where they are used as a substitute for *tur dhal* when its price is higher. According to traders, US crimson and pardina varieties have a chance in this market if the price is competitive. There is an aversion to pardina due to its brown seed coat and yellow cotyledon. The US red chief lentil is too expensive to become a major pulse in India.

Urd: Most of the imported *urd* come from Myanmar (mostly FAQ but a small volume of SQ). Some small quantities come from Thailand and Australia. Large size *urd* with good luster fetch a premium.

Mung: About 80 percent of *mung* imports comes from Burma. Ukraine, Kazakhstan, Pakistan, and China are other suppliers. As with *urd*, larger size and polished fetch a premium.

Pigeonpeas: Burma, Malawi, Kenya (preferred), and East Asian countries are the major suppliers of pigeonpeas.

Black eye beans: This is a small market, with the US and Burma as the major suppliers. Because these pulses have a short shelf life, cold storage is required, thus making them costly.

Trade Strategies Vary...

Although there are a large number of pulse importers in India, the ones that work with large, bulk volume are few, perhaps less than 15 with the largest concentration in Mumbai (about 8), followed by Calcutta (4) and Delhi (2) (see Annex 4). Others importers deal with smaller volumes in containers. Most importers work through indenters (international brokers) located in either the supplying countries or in India. Some work directly with suppliers. Indenters are the importers' major source of international market information and typically get a brokerage fee of 1 to 1.5 percent. As some importers put it, the pulse trade is based on faith, relationships, and loyalty.

Importers sell their pulses to mills and wholesalers through brokers and commission agents. Similar to the international segment, domestic brokers and commission agents are the main supplier of information to traders regarding the domestic supply, demand, and price. Brokerage fees vary from 0.5 to 1 percent.

Strategies vary from importer to importer. In Mumbai, the largest pulse importing port, almost 80 percent of the imports are delivered in bulk. Imports can be cif or fob, depending upon the cost. Typically, four or five traders share a one vessel load (20-25,000 tons). In Calcutta, there is no sharing; each importer buys a full shipload. In Delhi and Chennai, most imports arrive in 20-ton containers. Bulk purchasers have a clear cost advantage over container purchasers. Unit costs of shipping are lower by bulk vessel, plus it is cheaper to unload in bulk and do bagging in India than to purchase already bagged pulses.

Credit is not a problem for most importers. Typically international suppliers provide up to 60 days of interest-free credit. Furthermore, some of the Indian public sector trading companies, such as Minerals and Metals Trading Corporation of India (MMTC) and the State Trading Corporation of India (STC), which have large foreign exchange reserves, are willing to extend loans to private importers at nominal rates. Most bulk importers in Mumbai sell to wholesalers in the forward market which, with the non-availability of hedging instruments, is a risky business. If the domestic price falls, importers run the increased likelihood of buyers defaulting and having to liquidate the shipment at a loss. They usually sell on credit (up to 90 days), during which there is also foreign exchange risk.

Calcutta importers are more cautious, selling only after the cargo reaches port. If prices are low, they store pulses in the warehouse. Calcutta traders sell on a cash-only basis, which eliminates the risk of buyer default.

Most pulse imports from Canada (peas, chickpeas, and lentils) arrive in bulk, giving Canadian products a cost advantage over containerized US shipments. Product shipped in containers is typically bagged. Overall, about 80 percent of Indian pulse imports arrive in bulk form (15,000 to 20,000 metric tons). The spread between bulk and container freight, though fluctuating widely, is currently around \$20-25/ton from Canada to Mumbai. Most importers prefer Mumbai because the operation is hassle-free the unloading rate is fast. Freight rates to Calcutta and Madras run about \$5/ton higher. Containerized freight from Australia is more expensive. Only small traders like to import in containers because they are assured of uniform quality, lower risk, timely delivery, and easier handling. Smaller shipments are also easier to sell.

Canada Steps Up to Indian Demand...

No country has realized and responded to India's growing pulse import potential as aggressively as Canada, which has emerged as the leading supplier of pulses (green and yellow dry peas, *desi* and *kabuli* chickpeas, and lentils) to India. Canada has not only increased its area planted to pulses, but has even bred varieties especially favored by Indians. Moreover, despite similar growing conditions to neighboring parts of the US, Canada is able to sell its pulses at a much cheaper price. For example, Canadian green dry peas prices are currently about \$170/ton cif, around \$100/ton cheaper than the US. The lower price of Canadian peas is due to their lower quality (#2 grade or better) and the fact that they are shipped in bulk. US green peas are always of the premier grade and are containerized.

Although it would be worth investigating how Canada can be so much more competitive, certainly economies of scale and a greater ability to ship pulses in bulk play a role. The fact that the US bags and containerizes shipments places domestic exports at a disadvantage compared to Canada. Another factor affecting Canada's competitiveness is the undifferentiated nature of their pulses. US green peas, on the other hand, are branded. Although Indian importers are willing to pay a small premium for the superior quality of US green peas, the current spread is too large. If the wide price disparity between US and Canadian pulses (particularly for peas) continues, the US will have to be content with a minuscule share (around 2 percent) of India's huge pulse market.

Annex 1: India Production of Pulses (Thousand Metric Tons)

	Chick peas 1/	Tur	Urd	Mung	Peas& Beans	Lentil	Other 2/	Total
1971	5,199	1,883	656	700	781	375	2,224	11,818
1972	5,081	1,683	535	560	661	301	2,273	11,094
1973	4,537	1,928	613	524	465	373	1,467	9,907
1974	4,099	1,409	744	797	148	407	2,404	10,008
1975	4,015	1,834	671	652	476	457	1,909	10,014
1976	5,879	2,099	757	798	545	461	2,500	13,039
1977	5,424	1,725	693	797	436	394	1,892	11,361
1978	5,410	1,930	747	870	356	384	2,276	11,973
1979	5,739	1,887	727	876	350	446	2,158	12,183
1980	3,357	1,757	757	698	234	320	1,449	8,572
1981	4,328	1,958	959	979	291	465	1,647	10,627
1982	4,642	2,237	1,010	1,060	299	497	1,762	11,507
1983	5,290	1,989	998	1,159	340	489	1,707	11,857
1984	4,751	2,576	1,192	1,366	363	534	2,111	12,893
1985	4,562	2,585	1,164	1,054	331	547	1,720	11,963
1986	5,788	2,441	1,239	1,176	427	663	1,627	13,361
1987	4,532	2,271	1,243	1,077	388	659	1,537	11,707
1988	3,626	2,282	1,291	1,215	378	660	1,510	10,962
1989	5,129	2,718	1,620	1,420	417	734	1,811	13,849
1990	4,217	2,747	1,620	1,318	461	706	1,789	12,858
1991	5,356	2,417	1,646	1,384	605	851	2,006	14,265
1992	4,121	2,133	1,498	1,284	552	802	1,624	12,014
1993	4,383	2,406	1,531	1,406	550	791	1,748	12,815
1994	4,981	2,692	1,403	1,233	640	748	1,608	13,305

1995	6,436	2,144	1,143	1,071	667	784	1,793	14,038
1996	4,979	2,309	1,322	1,009	639	714	1,338	12,310
1997	5,570	2,660	1,442	1,316	722	962	1,572	14,244
1998	6,130	1,850	1,269	964	712	805	1,249	12,979
1999	6,800	2,710	NA	NA	NA	NA		14,910
2000	5,080	2,790	NA	NA	NA	NA		13,350
2001	3,870	2,480	NA	NA	NA	NA		11,720

1/ Mostly *desi* chickpeas; includes around 200,000 tons of *kabuli*

2/ Includes *kulthi*, *khesari*, moth beans, black eye beans, kidney beans, etc.

Source: Directorate of Economics & Statistics, GOI

Annex 2: Major Pulse Growing States

Pulses	State	Relative share (Cumulative) in %
Chickpeas	Madhya Pradesh	43 (43)
	Rajasthan	22 (65)
	Uttar Pradesh	13 (78)
	Maharashtra	10 (88)
Pigeonpeas	Maharashtra	30 (30)
	Uttar Pradesh	19 (49)
	Madhya Pradesh	13 (62)
	Gujarat	11 (73)
Lentils	Uttar Pradesh	44 (44)
	Madhya Pradesh	26 (70)
	Bihar	17 (87)
	West Bengal	6 (93)
<i>Urd</i>	Orissa	20 (20)
	Maharashtra	17 (37)
	Madhya Pradesh	9 (46)
	Tamil Nadu	9 (55)
<i>Mung</i>	Maharashtra	27 (27)
	Orissa	19 (46)
	Andhra Pradesh	13 (59)
	Rajasthan	9 (68)
Peas	Uttar Pradesh	80 (80)
	Madhya Pradesh	8 (88)
	Bihar	3 (91)
	Assam	3 (94)
Total Pulses	Madhya Pradesh	28 (28)
	Uttar Pradesh	20 (48)
	Maharashtra	16 (64)
	Rajasthan	7 (71)

Note: Figures within parentheses show the cumulative share of preceding states.

Source: Directorate of Economics & Statistics, GOI

Annex 3: Pulse Imports by Type and Origin

Type	2000/01	1999/00	1998/99	1997/98	1996/97	1995/96	1994/95	1993/94	1992/93	1991/92
Peas										
Australia	NA	88,682	76,676	73,405	45,189	40,835	41,315	75,509	33,458	11,921
Canada	NA	39,765	107,013	105,588	53,115	66,943	42,017	28,426	9,943	15,029
Myanmar	NA	10,390	49,813	66,686	27,931	3,337	18,621	23,967	23,859	3,870
USA	NA	924	1,463	7,328	2,391	5,632	7,740	18,121	7,406	20,231
Other	NA	6,171	22,496	28,626	25,904	56,291	35,271	52,502	31,739	65,129
Total	NA	145,932	257,461	281,633	154,530	173,038	144,964	198,525	106,405	116,180
Chickpeas										
Australia	NA	4,622	27,372	238,538	96,933	492	26,329	42,008	19,554	30,808
Canada	NA	918	50,717	36,234	0	0	0	1,500	212	274
Iran	NA	618	11,790	36,512	2,449	0	9,164	47,846	29,175	0
Myanmar	NA	1,706	4,491	19,685	8,654	3,290	5,259	31,563	35,016	0
Mexico	NA	1,047	0	6,808	110	1,180	0	0	0	0
Turkey	NA	1,657	4,349	43,230	17,374	8,914	2,065	13,632	21,767	50,049
UAE	NA	1,009	1,728	5,940	681	0	419	1,758	347	0
USA	NA	376	451	106	0	441	82	408	159	2,150
Other	NA	1,743	10,767	3,309	3,303	2,699	21,689	41,438	6,775	20,639
Total	NA	13,696	111,665	390,362	129,504	17,016	65,007	180,153	113,005	103,920
Lentil										
Australia	NA	1,209	0	200	0	0	0	0	3,164	706
Canada	NA	13,066	7,539	2,501	0	2,281	0	0	0	0
USA	NA	254	21	0	0	0	0	0	0	0
Turkey	NA	0	0	0	17,554	41	18,748	0	5	2,350
Syria	NA	0	0	0	32,436	12,993	28,021	0	0	0
Other	NA	16,486	14,420	3,229	16,492	11,421	14,048	2,351	772	128
Total	NA	31,015	21,980	5,930	66,482	26,736	60,817	2,351	3,941	3,184
Mung										
Australia	NA	1,616	152	115	0	0	964	0	0	0
Myanmar	NA	9,742	18,094	31,052	34,870	23,087	38,036	21,519	16,578	4,496
Other	NA	15,162	14,750	23,941	15,691	64,333	57,309	17,641	13,208	15,002
Total	NA	26,520	32,996	55,108	50,561	87,420	96,309	39,160	29,786	19,498
Tur										
Myanmar	NA	5,361	56,704	169,492	130,200	77,225	76,282	122,553	69,309	11,820
Other	NA	721	2,543	2,654	8,522	5,236	3,907	3,384	176	497
Total	NA	6,082	59,247	172,146	138,722	82,461	80,189	125,937	69,485	12,317
Urd										
Myanmar	NA	2,128	171	2,647	18,491	61,049	8,907	19,152	14,718	968
Canada	NA	461	0	0	0	0	0	0	0	0
Other	NA	307	9	0	2,705	8,904	4,861	2,545	566	4,503
Total	NA	2,896	180	2,647	21,196	69,953	13,768	21,697	15,284	5,471
Kidney bean										
Myanmar	NA	6,355	16,833	7,674	13,969	4,562	5,433	2,584	2,662	4,296
Canada	NA	537	0	0	0	0	0	419	0	0
Australia	NA	237	126	43	0	0	0	4,118	215	0
USA	NA	0	42	60	28	36	0	532	722	53
Other	NA	632	2,238	7,349	5,774	8,881	33,159	8,250	5,837	9,089
Total	NA	7,761	19,197	15,066	19,743	13,443	38,592	15,371	8,714	13,385
Other										
Australia	NA	1,095	6,485	12,004	14,133	7,980	19,533	7,745	6,563	1,830
Canada	NA	84	4,724	1,500	0	2,035	0	0	0	0
Myanmar	NA	28,231	107,357	131,062	72,964	16,349	36,951	54,684	33,400	50,004
Other	NA	3,892	7,492	17,785	24,592	5,803	25,994	7,163	2,010	38,163
Total	NA	33,302	126,058	162,351	111,689	32,167	82,478	69,592	41,973	89,997
TOTAL	348,471	267,204	628,784	1,085,243	692,427	502,234	582,124	652,786	388,593	363,952
Origin										
Australia	66,128	98,533	111,414	324,468	156,255	49,307	92,556	129,380	62,954	45,265
Canada	112,955	54,831	169,993	145,823	53,115	71,259	42,017	30,345	10,155	15,303
Myanmar	100,727	73,170	264,417	448,061	318,733	243,341	200,410	287,747	230,567	77,239
USA	4,470	1,715	2,449	8,178	3,672	6,109	8,331	19,409	8,787	23,469
Other	64,191	38,955	80,511	158,713	160,652	132,218	238,810	185,905	76,130	202,676

Source: Directorate of Commercial Intelligence & Statistics, GOI

Annex 4: Partial List of Major Pulse Importers

R. Piyarelall Group of Companies
1102, Embassy Center
Nariman Point
Mumbai - 400 021
Phone: 91-22-2832022
Fax: 91-22-2822275
E-mail: rplal@bom5.vsnl.net.in
Contact: Suresh Kumar Agarwal

Andagro Foods Limited
45-47 Atlanta, Nariman Point
Mumbai - 400 021
Phone: 91-22-2850758
Fax: 91-22-2850759
E-mail: pdongre@noblegrain.com
Contact: Pravin Dongre

Bheda Brothers
202, Kapadia Apartments, 39 S.V. Road
Vile Prale (W),
Mumbai - 400 056
Phone: 91-22-6192325
Fax: 91-22-6192331
E-mail: bheda@bom2.vsnl.net.in
Contact: S.L. Bheda

M. Lakhamshi & Co.
505, Churchgate Chambers
5 New Marine Lines
Mumbai - 400 020
Phone: 91-22-2620722
Fax: 91-22-2620706
E-mail: sawla@hotmail.com
Contact: Sanjiv M. Sawla

Kothari Commodities Ltd.
132 Mittal Court, B Wing
224 Nariman Point
Mumbai - 400 021
Phone: 91-22-2875249
Fax: 91-22-2872430
E-mail: bpmkg1@bom5.vsnl.net.in
Contact: Bimal Kothari

Jindal Overseas Corporation

4094-95, Naya Bazar
Delhi - 110 006
Phone: 91-11-3910197
Fax: 91-11-2941404
E-mail: jinaloc@del2.vsnl.net.in
Contact: Pradeep Jindal

Talakshi Lalji & Co.
224/25, Gokul Arcade A
Subhash Road
Vile Parle (East)
Mumbai - 400 057
Phone: 91-22-8204039
Fax: 91-22-8204039
E-mail: tilak@bom2.vsnl.net.in
Contact: Nanji Bheda

MM Agrichem Private Ltd.
312, Chaurchgate Chambers
5 New Marine Lines
Mumbai - 400 020
Phone: 91-22-2620432
Fax: 91-22-2620460

Ruchi Group
501 Mahakosh House
7/5 South Tukoganj
Indore- 452-001
Phone: 91-735-527917
Fax: 91-735-518127
Contact: Kailash Shahra

Dhanraj Chhaganlal & Co.
538-539 Market Yard Gultekdi
Pune - 411037
Phone: 91- 20 - 4272720
Fax: 91- 20 - 4272721
Contact: Sunil Sumatilal Mutha

Poona Dal & Besan Mills
71/A Industrial Estate

Pune- 411 013
Phone: 91-20-675959
Fax: 91-20- 673266
Contact: Sunil D. Parekh

R. Piyarelall Import & Export Ltd.
12, Government Place (East), 1st Floor
Calcutta - 700 069
Phone: 91-33-2205907
Fax: 91-33-2209939
E-mail: cal@rpiyarelallgroup.com
Contact: Ramesh Kumar Agarwal

Bhura Exports Ltd.
2, Clive Ghat Street
Sagar Estate
3rd Floor, Room # 5
Calcutta - 700 001
Phone: 91-33-2205121
Fax: 91-33-220 1866
Contact: G.C. Bhura

Prime Impex Ltd.
7, Camac Street
Azimganj House, 1st Floor
Calcutta - 700 017
Phone: 91-33-2826749
Fax: 91-33-2826882
E-mail: prime@cal2.vsnl.net.in
Contact: Anand Kothari

Adarsh Global Ltd.
159, Sajan Nagar
Indore- 452 001
Phone: 91-731-400901
Fax: 91-731-400904
E-mail: adarshg@bom4.vsnl.net.in
Contact: Ram Avtar Jaju

Veesha International
Regent Chambers, 7
11th Floor

208 Nariman Point
Mumbai - 400 021
Phone: 91-22-2852328
Fax: 91-22-28766134
E-mail: veesha@bom3.vsnl.net.in
Contact: Dinesh Isharani

Shree Mahalakshmi Traders & co.
149 Govindappa Naicken Street
2nd Floor
Chennai - 600 001
Phone: 91-44-5222988
Fax: 91-44-5230746

Note: While it is impractical to provide a complete list of suppliers, the partial list is furnished for your information with the understanding that no discrimination is intended and no guarantee of reliability is implied. For additional information, please contact:

**The Pulses Importers Association
78/79 Bajaj Bhawan
Nariman Point
Mumbai - 400 021
Phone: 91-22-202 3255
Fax: 91-22-202 9236
E-mail: iopea@bom3.bsnl.net.in**